

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 85-103

WASTE DISCHARGE REQUIREMENTS FOR:

SAN QUENTIN DISPOSAL COMPANY AND CAL-POX INC.  
CLASS III LANDFILL AND CLASS II WASTE MANAGEMENT UNIT  
SAN RAFAEL, MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter call the Board), finds that:

1. San Quentin Solid Waste Disposal site is owned by Cal-Pox Inc. and is operated by the San Quentin Disposal Company (hereinafter called the discharger). The facility is a Class III landfill and consists of approximately 38 acres of low-lying diked land and a leachate containment pond. The site is located adjacent to San Pablo Bay on the west, and north and east of the San Rafael Drainage Channel, as shown in Attachment A, which is incorporated herein and made a part of this Order.
2. The discharger is currently governed by this Board's Order No. 79-11 and amended by Order No. 82-11, prescribing waste discharge requirements for the disposal site. The existing requirements must be modified to comply with Articles 2, 3 and 4 of Title 23, Chapter 3, Subchapter 15 of the California Administrative Code which became effective on November 26, 1984 (Subchapter 15). The landfill area must meet the requirements as a Class III landfill. The leachate containment pond must meet the requirements as a Class II Waste Management Unit.
3. The discharger accepts approximately 36,000 tons of refuse per year. The non-hazardous solid waste is primarily building debris. The leachate from the site is collected by graded drainage to a 3.5 acre leachate pond. The supernatant from this pond is disposed via evaporation and or discharged to the sanitary sewer.
4. The disposal site, subsequent to modifications required to comply with this Order, will meet the criteria contained in Subchapter 15 for the classification of the site as a Class III landfill to receive non-hazardous solid waste, and as a Class II waste management unit to receive leachate.

5. The site is underlain by soft, compressible silts and clays. Brackish groundwater exists beneath the site. Surface water that falls on site areas, other than the active face, is intercepted and diverted offsite.
6. The Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) on July 21, 1982 and this Order implements the water quality objectives stated in that plan for San Pablo Bay.
7. The beneficial uses of San Pablo Bay are:
  - a) Water Contact Recreation
  - b) Non-Contact Recreation
  - c) Ocean Commercial and Sport Fishing
  - d) Wildlife Habitat
  - e) Preservation of Rare & Endangered Species
  - f) Estuarine Habitat
  - g) Fish Migration and Spawning
  - h) Shellfish Harvesting
  - i) Industrial Service Supply
  - j) Navigation
8. The action to revise waste discharge requirements and continue operation of an existing landfill is exempt from the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), in accordance with Section 15301 of the Public Resources Code.
9. The Board notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
10. The Board, in a public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger and any other persons that own the land or operate this site, shall meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and shall comply with the following:

A. Prohibitions

1. The disposal of wastes shall not create a pollution or nuisance as defined in Section 13050 of the California Water Code.
2. Wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.
3. Wastes shall not be disposed of in any position where they can be carried from the disposal site and discharged into waters of the State.
4. Hazardous wastes and/or designated wastes shall not be deposited nor stored at this site.
5. Waste shall not be placed in the Class III landfill unless it contains at least 50 percent solids.
6. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place outside the disposal area:

a. Surface Waters

- ° Floating, suspended, or deposited macroscopic particulate matter or foam;
- ° Bottom deposits or aquatic growths;
- ° Alteration of temperature, turbidity or apparent color beyond present natural background levels;
- ° Visible, floating, suspended or deposited oil or other products of petroleum origin;
- ° Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

b. Groundwater

The groundwater shall not be degraded as a result of the solid waste disposal operation.

7. Leachate from wastes and ponded water containing leachate shall not be discharged to waters of the State.
8. Truck wash water or oil shall not be discharged to the landfill or to waters of the United States, unless approved in writing by the Executive Officer.

B. Specifications

1. Water used during disposal site operations shall be limited to a minimal amount necessary for dust control and fire suppression.
2. The site shall be protected from any washout or erosion of wastes or covering material and from inundation, which could occur as a result of a 100 year 24 hour precipitation for the Class III landfill, or a 1000 year 24 hour precipitation for the leachate containment pond.
3. Surface drainage from tributary areas, and internal site drainage for surface or subsurface sources shall not contact or percolate through wastes during disposal operation and for the active life of the site. The perimeter drainage ditches and all other facilities shall be designed to convey the 100 year storm runoff, and withstand differential settlement.
4. The leachate containment pond shall be modified with a liner or liners according to the specifications and standards under Section 2542 and general construction standards under Section 2341 of Subchapter 15, after approval of the proposed modifications by the Executive Officer. An exception to this may be granted by the Board based on a demonstration submitted by the discharger pursuant to Section 2510(b) and (c) of Subchapter 15.
5. The site shall be located in order to comply with criteria and standards under Section 2533 of Subchapter 15. An exemption to this may be granted by the Board based on a demonstration submitted by the discharger pursuant to Section 2510(b) and (c) of Subchapter 15.

6. The site shall be operated to ensure that any incoming new waste will be a minimum of 5 feet above the highest anticipated elevation of underlying ground water, except for leachate containment pond area.
7. The discharger shall assure that the foundation of the site and the structures which control leachate, surface drainage, erosion and gas for this site are maintained under conditions generated during the maximum credible earthquake for the Class II unit and the maximum probable earthquake for the Class III unit.
8. The leachate containment pond (Class II waste management unit) shall contain a minimum of 2 feet of freeboard at all times, and shall meet the criteria contained in Section 2548 of Subchapter 15.
9. As portions of the Class III landfill are closed, the exterior surfaces shall be graded to a minimum slope of three percent in order to promote lateral runoff of precipitation. In addition, all completed disposal areas shall be covered with a minimum of three feet of uncontaminated material one foot of which is compacted to attain a permeability no greater than  $1 \times 10^{-6}$  cm/sec. A lesser slope, thickness of final cover or permeability may be allowed by the Board upon demonstration that erosion control, percolation control, and coverage of refuse will not be adversely affected.

C. Provisions


1. The discharger shall comply with all prohibitions, specifications, and provisions of this Order immediately upon adoption, except for B.2, B.3, B.4, B.5 and B.7. The discharger shall comply with these specifications in accordance with the following time schedule:
  - a. Specification B.2, B.3 and B.7
    1. Submit report demonstrating that compliance is being achieved or submit plan and time schedule for achieving compliance by Dec. 15, 1985
    2. Achieve compliance if not demonstrated above by Sept. 15, 1986

b. Specification B.4 and B.5

1. Submit report proposing necessary site modifications or submit demonstration for exception by Dec. 15, 1985
  2. Achieve compliance by Dec. 15, 1986
2. Reports pursuant to Provision C.1 shall be prepared under the supervision of a registered engineer or certified engineering geologist.
  3. A revised site closure plan which includes a detailed description of site closure actions already implemented shall be submitted by March 1, 1986, in compliance with the provisions set forth in Article 8 of Subchapter 15.
  4. Within 30 days after the completion of filling of any portions of the disposal areas, submit documentation that the exterior surfaces of these newly completed portions are covered and graded in accordance with Specification B.9.
  5. The discharger shall remove and relocate any wastes which are discharged at this site in violations of these requirements.
  6. The discharger shall file with this Board a report of any material change or proposed change in the character location of quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours of ownership of the disposal area(s).
  7. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
  8. This Board considers the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control which arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

9. The discharger is required to comply with a Self-Monitoring Program as ordered by the Executive Officer.
10. The discharger shall permit the Regional Board:
  - (a) Entry upon premises on which wastes are located or in which any required records are kept.
  - (b) Access to copy any records required to be kept under terms and conditions of this Order.
  - (c) Inspection of monitoring equipment or records, and
  - (d) Sampling of any discharge.
11. These requirements do not authorize commission of any act causing injury to the property, of another or of the public, do not convey any property rights, does not remove liability under federal, state or local laws and does not authorize the discharge of waste without appropriate federal, state or local permits, authorization or determinations.
12. Order Nos. 79-11 and 82-11 are hereby rescinded.

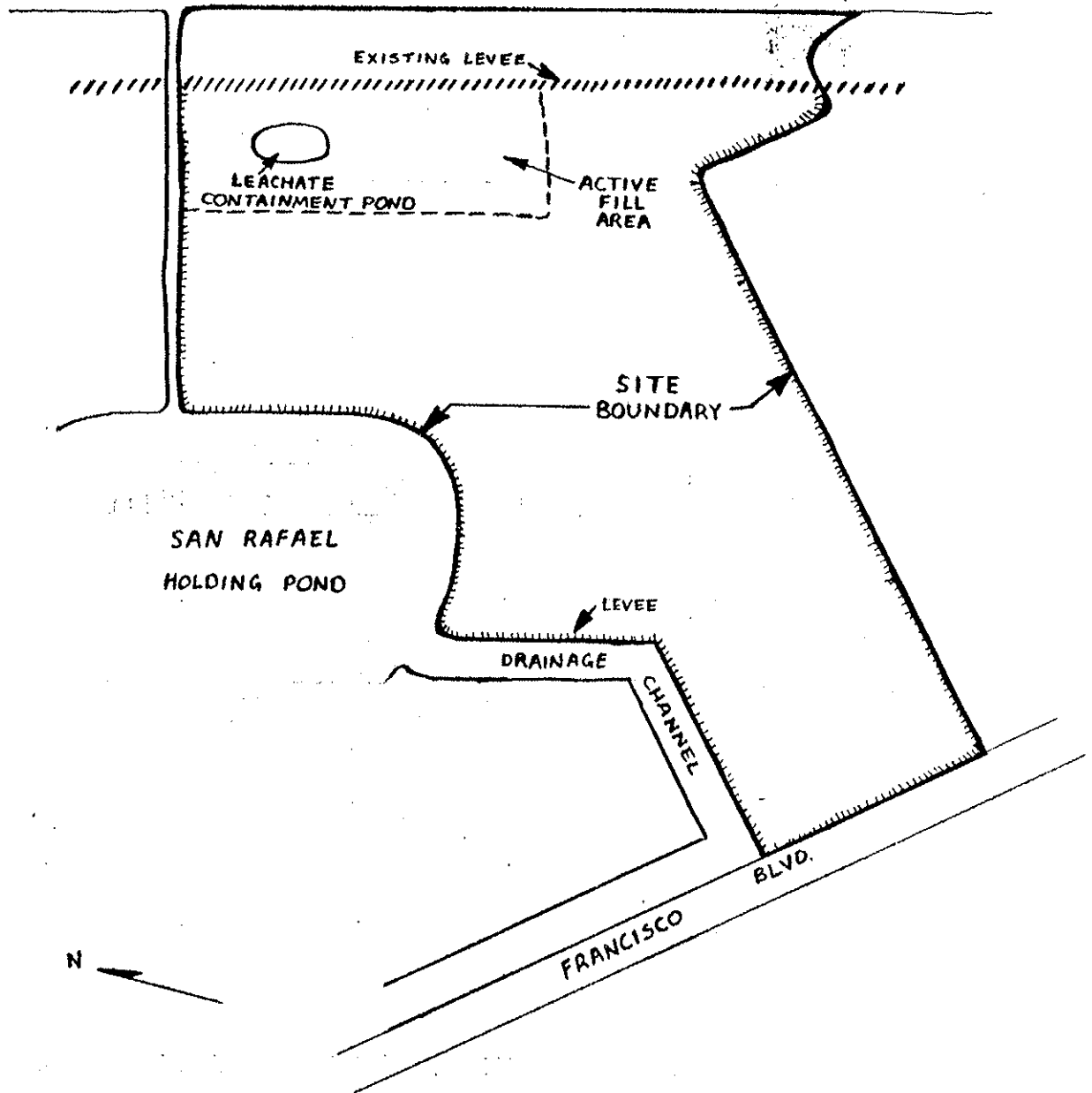
I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on September 18, 1985.

*for*   
ROGER B. JAMES  
Executive Officer

Attachment:

A

SAN PABLO BAY



not to scale

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ATTACHMENT A

SAN QUENTIN  
DISPOSAL SITE

DRAWN BY: LWT DATE: 7-12-85 DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

REVISED  
SELF-MONITORING PROGRAM

FOR

SAN QUENTIN DISPOSAL COMPANY AND CAL-POX, INC.  
SAN QUENTIN CLASS II DISPOSAL SITE  
SAN RAFAEL, MARIN COUNTY

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board including the methods specified in attached APPENDIX I.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITIONS OF TERMS

1. A grab sample means a sample collected at any time.
2. Standard Observations
  - a. Receiving Water - Periphery of Disposal Facilities
    - (1) Discoloration and turbidity: description of color, source, and size of affected area.
    - (2) Odor: presence or absence, characterization, source, and distance of travel.
    - (3) Evidence of beneficial water use: presence of water-associated wildlife, fishermen, and other recreational activities in the vicinity of the sampling stations.
    - (4) Hydrographic condition:
      - (a) Water sand sampling depths.
    - (5) Weather condition:
      - (a) Wind - direction and estimated velocity.
      - (b) Precipitation total precipitation during the previous five days and on the day of observation.

b. Land Retention or Disposal Area

This applies both to liquid and solid wastes confined or unconfined.

- (1) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch.
- (2) Odor: presence or absence, characterization, source, and distance of travel.
- (3) Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.

D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform observations, sampling, and analyses according to the schedule in Part B.

E. RECORDS TO MAINTAINED

1. Written reports shall be maintained at the landfill office and shall be retained for a minimum of 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

- a. Identity of sampling and observation stations by number.
- b. Date and time of sampling and/or observations.
- c. Date and time that analyses are started and completed, and name of personnel performing the analyses.
- d. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to a specific section of Standard Methods is satisfactory.
- e. Calculations of results.
- f. Results of analyses and/or observations.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written reports shall be filed for each calendar month (unless specified otherwise in Part B) by the fifteenth day of the following month. In addition, an annual report shall be filed as indicated in F-1-f. The reports shall be comprised of the following:

- a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

Monitoring reports shall be signed as follows:

- (1) In the case of corporations, by a principal executive officer at the level of vice-president or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates,
- (2) In the case of a partnership, by a general partner, or
- (3) In the case of a sole proprietorship, by the proprietor,
- (4) In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be specified by the Regional Board.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, and station, signed by the laboratory director. The report format will be specified by the Regional Board.

e. List of Approved Analyses

- (1) Listing of analyses for which the discharger is approved by the State Department of Health.
- (2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

f. Annual Reporting

By January 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:

1. Tabular and graphic summaries of the monitoring data obtained during the previous year.
2. Comprehensive discussion of the compliance record and corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
3. A map showing the area in which filling has been completed during prior calendar year.
4. Summary of groundwater analyses indicating any change in the quality of the groundwater.

PART B

I. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES AND OBSERVATIONS

A. WASTE MONITORING

1. Monthly, record the total volume and weight of a refuse (in cubic yards and tons) deposited on the site during the month, and the daily average. Report monthly.
2. Monthly, record the volume of fill completed, in cubic yards, showing the location(s) and dimensions on a sketch or a map. Report monthly.

B. ON SITE OBSERVATION

<u>Station</u>	<u>Description</u>
S-1 thru S-'n'	Observation stations located on presently active area or completed portion of the site at grid squares delineated by 500 foot grid network.

<u>Station</u>	<u>Frequency of Observation</u>	<u>Observations</u>
All S Stations for active disposal areas	Weekly throughout the year  <u>Report monthly</u>	<ol style="list-style-type: none"><li>1. Evidence of ponded water at at any point on the fill area.</li><li>2. Evidence of refuse not confined within the fill area.</li><li>3. Evidence of erosion and "day-lighted" refuse.</li><li>4. Evidence of waste in contact with pools of surface water.</li><li>5. Evidence of odors presence or absence, the characteristics, intensity, source, distance of travel.</li><li>6. Evidence of leachate leaving the disposal site, and estimated size of affected area.</li></ol>

C. SEEPAGE AND/OR LEACHATE MONITORING

<u>Station</u>	<u>Description</u>
L-1 thru L-n	At a point at which discharge occurs from the disposal area(s). Include a map indicating location of discharges(s).

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analysis</u>	<u>Units</u>
All L stations	Grab sample daily during each discharge or occurrence	TOC	mg/L
		Dissolved sulfide	mg/L
		Odors	description
		Color	description
		pH	pH units
		Conductivity	umhos/cm

A report shall be made by telephone of any seepage or leachate leaving property immediately after occurrence. A written report shall be filed with this Board within five days and shall contain the following information: 1) map showing location(s) of discharge, 2) flow rate, 3) nature of effect (i.e. discoloration of receiving water, size of affected area), and 4) corrective measures taken.

D. Groundwater Monitoring

WELL SPECIFICATIONS

<u>Well</u>	<u>Description</u>
GU	Groundwater monitoring well upgradient of disposal site, adjacent to Francisco Blvd.
G1A and G2-G6	Groundwater monitoring wells located in the perimeter levee as shown in Attachment A.
GR1A and GR1-GR4	Leachate monitoring wells as shown in Attachment A.

Groundwater wells G3 and G4, and leachate wells GR1 to GR4 shall be completed by July 1, 1986.

SAMPLING AND ANALYSIS

<u>Well</u>	<u>Type of sample and Frequency</u>	<u>Analyses</u>	<u>Units</u>
All "G" wells	Grab sample quarterly throughout year	water level	feet M.S.L.
		chloride	mg/L
		TOC	mg/L
		TDS	mg/L
		pH	pH units

<u>Report Quarterly</u>	NO3--N	mg/L as N
	Kjeldahl N	mg/L as N
	Electrical	
	conductivity	umhos/cm
	Zinc	
	Lead	

Prior to sampling "G" wells, they shall be purged until the water has attained a stable pH or conductivity, but not less than three well volumes.

<u>Well</u>	<u>Type of sample and Frequency</u>	<u>Analyses</u>	<u>Units</u>
All	Grab sample	water level	feet M.S.L.
"GR"	quarterly		
wells	throughout year		

Report Quarterly

Grab sample, once only upon completion of well.	chloride	mg/L
	TOC	mg/L
	TDS	mg/L
	pH	pH units
	NO3--N	mg/L as N
Report upon obtaining results	Kjeldahl N	mg/L as N
	Electrical	
	conductivity	umhos/cm
	Zinc	mg/L
	Lead	mg/L

E. WELL CONSTRUCTION METHODS

All new G wells shall be constructed using an auger (hollow or solid stem) and completed with 4-inch casing. The wells shall be screened appropriately to the geology, and the annular space opposite the screened interval shall be gravel packed with clean washed pea gravel. The wells shall be cemented from the top of the screened zone to the ground surface, and an appropriate surface grout seal installed. No solvent glues may be used in the casing. For wells G5 and G6, which are groundwater wells drilled through refuse, perforated casing should not be installed above the bottom of the refuse. Well logs shall be submitted with the results of the first analysis. ..

All new GR wells shall be located at the lowest point in each cell at which waste is placed. These wells shall utilize 4-inch casings and shall be screened along the entire depth of waste. A one foot solid casing may be utilized below the screened

interval; however, it shall be placed below the lowest level of waste fill.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing Self Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established by this Board.
2. Has been ordered in writing by the Executive Officer on April 15, 1986 and becomes effective immediately.
3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger and will be revised upon written agreement of the Executive Officer and the discharger.

Roger B. James  
Executive Officer

Attachment

A: Site Map

